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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/733,515

12/12/2003

Choong-Jae Lee

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KED & ASSOCIATES, LLP
P.O. Box 221200
Chantilly, VA 20153-1200

EXAMINER

DABNEY, PHYLESHA LARVINIA

ART UNIT

PAPER NUMBER

2614

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DELIVERY MODE

09/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,515	Applicant(s) LEE, CHOONG-JAE	
	Examiner PHYLESHA DABNEY	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-10,12 and 14-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-10,12,14-24,28 and 29 is/are rejected.
- 7) ☒ Claim(s) 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/1/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the application filed on 9 July 2007 in which claims **1-2, 4, 6-10, 12, 14-29** are pending, and claims **3, 5, 11, 13** are cancelled.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **1-2, 4, 6, 18-21, 23-24, 28** are rejected under 35 U.S.C. 102(b) as being anticipated by Inubushi et al (U.S. Publication No. 6,064,453).

Regarding claims 1-2, 4, and 28, Inubushi teaches a folder type mobile terminal, comprising: an upper cover (1); a lower cover (fig. 1) attached to the upper cover and configured to receive a display module (4-6) therein; and a display protecting member (8-9) configured to be fitted at an inner surface of the lower cover and to cover an outer surface of the display module so as to protect the display module from an external force, wherein the display protecting member (8-9, 13) comprises a lower portion (8) and a supporting rib (9) formed extended upwardly a predetermined height and width from the lower portion so as to cover the circumferential surface of the display module and wherein a predetermined air gap (fig. 6) is maintained between an upper surface of the supporting rib and a lower surface of the upper cover prior to an external impact on the upper cover, wherein the lower surface of the upper cover deflects through the air

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gap when an external impact is imposed on the upper cover, the upper surface of the first supporting rib arranged to contact the lower surface of the deflecting upper cover to prevent the lower surface of the deflecting upper cover from contacting the display module.

Regarding claim 6, Inubushi teaches the terminal of claim 1, wherein the display module (4-6) is mounted in an open portion (figs. 1 and 6) formed on a lower portion of the display protecting member.

Regarding claims 18-21 and 23-24, Inubushi teaches a display protecting mechanism (8-9, 13) for a mobile terminal, comprising: a lower portion (fig. 1); an open portion (figs. 1 and 6) formed in the lower portion and configured to receive a display module; a supporting rib (9) formed extended upwardly from the lower portion a predetermined height and width, and configured to cover a circumferential surface of the display module, wherein the display protecting mechanism is configured to be installed in a lower cover of the mobile terminal such that a predetermined clearance in the form of a first gap (fig.6, raised claws 13 of sheet 7 extending over rib 9) is formed between an upper surface of the supporting rib and a lower surface of a cover of the mobile terminal when the upper and lower covers of the mobile terminal are attached prior to an external impact on the upper cover; and a second gap (formed of sheet 7) formed between an upper surface of the display module and the lower surface of the cover of

the mobile terminal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **7-8, and 22**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al.

Regarding claims 7-8, and 22, Inubushi does not teach or restrict the protective member being made of metal.

However, the Examiner takes official notice that the durability of stainless steel is known as well as, its dual purpose of providing electromagnetic field shielding in electronics equipment.

Therefore, it would have been obvious to one of ordinary skill in the art to use stainless steel in the invention of Inubushi for the reasons stated.

Claims **9-10, 12, 14-17, and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Inubushi et al in view of Shimazaki et al (U.S. Publication No. 2001/000049293).

Regarding claim 9, Inubushi teaches the terminal of claim 10, wherein the display module (Inubushi, 4-6) comprises a main display comprising a liquid crystal display (LCD).

Inubushi does not teach the terminal utilizing a sub display.

Shimazaki teaches the terminal utilizing a sub display (figs. 1-12) in addition to the main display for providing information relative to incoming calls even when the two housings of the folder type phone are closed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a second display (sub display) in Inubushi as taught by Shimazaki for the reason stated.

Regarding claims 10, 12, 15, and 29, Inubushi teaches a mobile terminal, comprising a first cover (1) and a second cover (fig. 1), wherein the first cover and the second cover are configured to be attached so as to form a space therebetween; and a display protecting member (8-9, 13) configured to be installed in the space formed between the first cover and the second cover and to surround a display module installed therein so as to prevent contact between the display module and the folder, wherein the display protecting member (8-9, 13) comprises a lower portion (8) and a supporting rib (9) formed extended upwardly from the lower portion, wherein the supporting rib (9) is configured to cover a circumferential surface of the display module, and wherein a predetermined clearance (fig. 3) in the form of a first air gap (fig.6, raised claws 13 of sheet 7 extending over rib 9) is formed between an upper surface of the supporting rib

and a lower surface of the first cover when the first cover and the second cover are attached prior to an external impact on the first cover.

Inubushi teaches using the display system in the mobile device (col. 1 lines 13-24), but Inubushi does not specifically teach the mobile device being a folder type.

Shimazaki teaches utilizing a display system in a folder type mobile device (figs. 1-12) for viewing content.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the display system as taught by Inubushi in folder type mobile device as taught by Shimazaki for the reason stated.

Regarding claim 14, the combination of Inubushi and Shimazaki teaches the terminal of claim 10, wherein a second gap (formed of sheet 7) is maintained between an upper surface of the display module and a lower surface of the first cover when the first cover and the second cover are attached so that, when an external force is applied to the first cover, deformation of the first cover is substantially prevented (col. 4 line 54 through col. 5 line 9), thereby preventing damage to the display module.

Regarding claim 16, Inubushi does not teach or restrict the protective member being made of metal.

However, the Examiner takes official notice that the durability of stainless steel is known as well as, its dual purpose of providing electromagnetic field shielding in electronics equipment.

Therefore, it would have been obvious to one of ordinary skill in the art to use stainless steel in the invention of Inubushi for the reasons stated.

Regarding claim 17, the combination of Inubushi and Shimazaki teaches the terminal of claim 10, wherein the display module (Inubushi, 4-6) comprises a main display comprising a liquid crystal display (LCD).

Further, Shimazaki teaches the terminal utilizing a sub display (5) in addition to the main display for providing information relative to incoming calls even when the two housings of the folder type phone are closed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a second display (sub display) in the combination of Inubushi and Shimazaki as additionally taught by Shimazaki for the reason stated.

Allowable Subject Matter

Claims 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

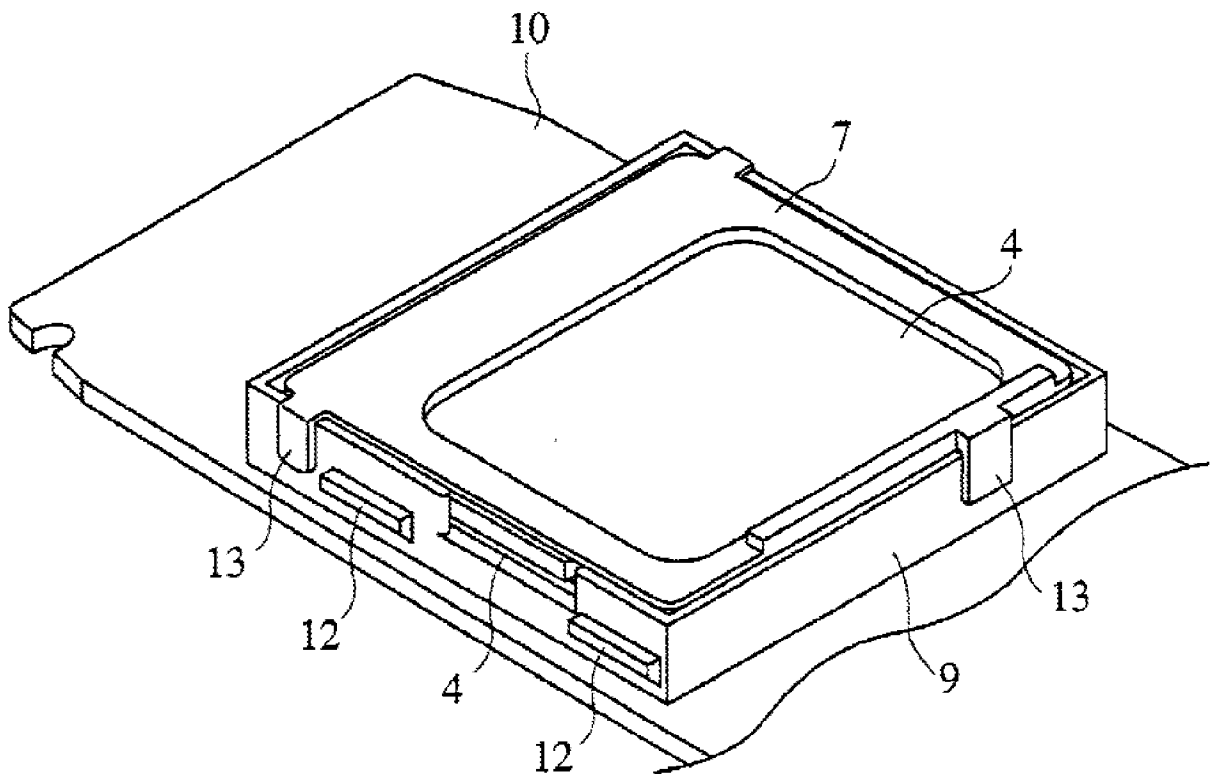
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Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection. More specifically, the arguments are moot in view of the second embodiment of Inubushi.

With respect to the Applicant's arguments that "*a predetermined air gap is not formed between an upper surface of the supporting rib and a lower surface of the first cover,*" the Examiner disagrees. As shown in the Figure 6 below, the claws (13) of rubber sheet (7) provides a thickness above the rib (9) such that an air gap is formed therebetween the upper surface of the rib and the lower surface of the first cover. \

Therefore, the rejection is maintained.

FIG.6



With respect to the Applicant's arguments pertaining to claim 29 that Inubushi *does not teach a folder type device*. In the previous rejection, Inubushi was not used to support a folder type device instead Shimazaki was used to teach the use of a display module in a folder type device for claims 10, 12, and 15. Newly added claim 29 has been addressed under 35 U.S.C. 103(a) above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHYLESHA DABNEY whose telephone number is (571)272-7494. The examiner can normally be reached on Monday through Thursday 9:00-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P O Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(703) 273-8300, for formal communications intended for entry and for informal or draft communications, please label "Proposed" or "Draft" when submitting an informal amendment.

Hand-delivered responses should be brought to:

Customer Service Window
Randolph Building
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Alexandria, VA 22314

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September 3, 2008

PLD

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614

1. A folder type mobile terminal, comprising: an upper cover; a lower cover attached to the upper cover and configured to receive a display module therein; and a display protecting member configured to be fitted at an inner surface of the lower cover and to cover an outer surface of the display module so as to protect the display module from an external force.
2. The terminal of claim 1, wherein the display protecting member is configured to surround a circumferential surface of the display module.
3. The terminal of claim 2, wherein the display protecting member comprises a lower portion and a supporting rib formed extended upwardly a predetermined height and width from the lower portion so as to cover the circumferential surface of the display module.
4. The terminal of claim 3, wherein a height of the supporting rib is greater than a height of the display module.
5. The terminal of claim 3, wherein an upper surface of the supporting rib maintains a constant interval with a lower surface of the upper cover.
6. The terminal of claim 1, wherein the display module is mounted in an open portion formed on a lower portion of the display protecting member.
7. The terminal of claim 1, wherein the display protecting member is formed of a metal material.
8. The terminal of claim 7, wherein the display protecting member is formed of stainless steel.
9. The terminal of claim 1, wherein the display module comprises at least a sub display and a main display, and wherein at least one of the displays comprises a liquid crystal display (LCD).
10. A folder type mobile terminal, comprising: a folder portion, comprising a first cover and a second cover, wherein the first cover and the second cover are configured to be attached so as to form a space therebetween; and a display protecting member configured to be installed in the space formed between the first cover and the second

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cover and to surround a display module installed therein so as to prevent contact between the display module and the folder.

11. The terminal of claim 10, wherein the display protecting member comprises a lower portion and a supporting rib formed extended upwardly from the lower portion, wherein the supporting rib is configured to cover a circumferential surface of the display module.

12. The terminal of claim 11, wherein an upper end of the supporting rib extends beyond an upper surface of the display module.

13. The terminal of claim 12, wherein a first gap is formed between an upper surface of the supporting rib and a lower surface of the first cover.

14. The terminal of claim 13, wherein a second gap is maintained between an upper surface of the display module and a lower surface of the first cover when an external force is applied to the first cover, causing the first gap to be reduced (or causing the upper surface of the supporting rib to contact a lower surface of the first cover?).

15. The terminal of claim 10, wherein the display module is installed in an open portion formed on a lower portion of the display protecting member.

16. The terminal of claim 10, wherein the display protecting member is formed of a metal material.

17. The terminal of claim 10, wherein the display module comprises at least a sub display and a main display, and wherein at least one of the displays comprises a liquid crystal display (LCD).

18. A display protecting mechanism for a mobile terminal, comprising: a lower portion; an open portion formed in the lower portion and configured to receive a display module; a supporting rib formed extended upwardly from the lower portion a predetermined height and width, and configured to cover a circumferential surface of the display module; a first gap formed between an upper surface of the supporting rib and a lower surface of a cover of the mobile terminal; and a second gap formed between an upper surface of the display module and the lower surface of the cover of the mobile terminal.

19. The display protecting mechanism of claim 18, wherein an upper portion of the supporting rib extends beyond an upper surface of a display module installed in the open portion.

20. The display protecting mechanism of claim 19, wherein the second gap is greater than zero when the first gap is reduced to substantially zero due to an external force.

21. The display protecting mechanism of claim 19, wherein the second gap remains

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greater than the first gap when an external force is applied to the cover of the mobile terminal.

22. The display protecting mechanism of claim 18, wherein the lower portion and supporting rib are formed of stainless steel.

23. A mobile terminal comprising the display protecting mechanism of claim 18.